



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/669,597	09/25/2003	Alexa L. Martinez	2057.0040002	1312
26111	7590	05/27/2011 STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C. 1100 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005		
EXAMINER		GUPTA, ANISH		
ART UNIT		PAPER NUMBER		
1654				
MAIL DATE		DELIVERY MODE		
05/27/2011		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/669,597	<b>Applicant(s)</b> MARTINEZ ET AL.
	<b>Examiner</b> ANISH GUPTA	<b>Art Unit</b> 1654

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 03/04/2011.

2a) This action is FINAL.      2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) See Continuation Sheet is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1,3-7,9-21,23,24,35,38,59,61-63,65,67,73-77,79,90,94,109-131,134,137 and 140-171 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)  
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  
 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 03-04-11.

4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.  
 5) Notice of Informal Patent Application  
 6) Other: \_\_\_\_\_

Continuation of Disposition of Claims: Claims pending in the application are 1,3-7,9-21,23,24,35,38,59,61-63,65,67,73-77,79,90,94,109-131,134,137 and 140-171.

**DETAILED ACTION**

1. The amendment filed, 03-04-2011, is acknowledged. Claims 1, 3-7, 9-21, 23-24, 35, 38, 59, 61-63, 65, 67, 73-77, 79, 90, 94, 109-131, 134, 137 were amended and claims 140-171 were added.

***Information Disclosure Statement***

2. The information disclosure statement filed 10/1/09 fails to comply with 37 CFR 1.98(a)(3) because it does not include a concise explanation of the relevance, as it is presently understood by the individual designated in 37 CFR 1.56(c) most knowledgeable about the content of the information, of each patent listed that is not in the English language. It has been placed in the application file, but the information referred to therein has not been considered.

Note that an explanation was not provided for JP 2002-527491, JP 50-42087, JP 53-24033, JP 8-283282, JP 6-507410. These references have been placed in the file but have not been considered.

Applicants have stated that for each reference a concise statement of the relevance of each foreign language document has been provided. However, in reviewing the prosecutorial history of the file, it is unclear when the concise statements were submitted for references JP 2002-527491, JP 50-42087, JP 53-24033. In the IDS filed 03-04-11, a concise statement for references JP 8-283282 and JP 6-507410 was not provided by Applicant.

***Election/Restrictions***

3. An election was conducted in this Application on 10/10/2005 with an election of species. Applicants properly responded to the election of species and elected the species GM-CSF,

Art Unit: 1654

dihydroxy polyethylene glycol. Since prior art has not been found on the claimed base claim 1, the election of species to the claims has been vacated.

### **Withdrawn Rejections**

4. The rejection of claims 1-21, 23-26, 35, 38, 59-77, 79-81, 90, 93-96, 109-111, 118-119, rejected under 35 U.S.C. 102(b) as being anticipated by Lee et al. (US4261973) is hereby withdrawn in view of Applicants arguments

5. The rejection of claims 1-21, 23-26, 35, 38, 59-77, 79-81, 90, 93-96, 109-110, 114, 118, 122, rejected under 35 U.S.C. 102(b) as being anticipated by Pepinsky et al. (WO00/23114) is hereby withdrawn in view of Applicants arguments.

6. The rejection of claims 1-21, 23-26, 35, 38, 59-77, 79-81, 90, 93-96, 109-110, 113, 118, 121, and 126-133 are rejected under 35 U.S.C. 103(a) as being unpatentable over Delgado (US5349052) in view of Zalipsky et al. and Pepinsky et al. (WO00/23114) is hereby withdrawn in view of Applicants arguments.

### **New Grounds For Rejections**

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claim 1, 3-7, 9-21, 23-24, 35, 38, 59, 61-63, 65, 67, 73-77, 79, 90, 94, 109-131, 134, 137, 140-171 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description

requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The claims have been amended to recite "at least 95% of said polyalkylene glycol(s) is or are attached to said peptide, protein or glycoprotein at a single site on said polyalkylene glycol(s), wherein a hydroxyl group is present on at least 95% of the distal polyalkylene glycol termini in said conjugate." This amendment to the claims constitutes as new matter.

Applicants have argued that that support for the claimed amendments can be found on page 10, paragraph [0024], page 18 paragraph [0053], pages 59-61 and pages 62-64. However, these pages nor the disclosure has a whole provide *ipsis verbis* support or inherent/implicit support.

#### **Ipsis Verbis Support**

The specification lacks any literal support for the concept that at least 95% of the polyalkylene glycol(s) is or are attached to a protein/peptide/glycoprotein at a single site and a hydroxyl group is present on at least 95% of the distal polyalkylene glycol termini in said conjugate. The claims, as written, allow for at least 5% of the polyalkylene glycol(s) to have some other modification on distal terminus, including methylation or crosslinkage to another protein/peptide/glycoprotein molecule. This concept was not literally described in the originally file disclosure.

The originally filed disclosure discussed percentages for purified substance. In this context, the specification described that the substance may be 95% or 98% pure (see para [0058]). The specification also described the percent reduction of antigenicity (see paragraph [0065]). However, the specification never provides any literal support for percentages of polyalkylene glycol(s) that are

attached to a protein/peptide/glycoprotein at a single site or literal support for the concept that hydroxyl group is present on at least 95% of the distal polyalkylene glycol termini.

### **Inherent Support/Implicit Support**

“While there is no *in haec verba* requirement, newly added claim limitations must be supported in the specification through express, implicit, or inherent disclosure.” See MPEP 2163.

The originally filed disclosure does not provide any implicit or inherent support for the claimed concept. In fact based on the originally filed disclosure, one would conclude that 100% of the polyalkylene glycol(s) is or are attached to a protein/peptide/glycoprotein at a single site and a hydroxyl group is present on 100% of the distal polyalkylene glycol termini in said conjugate. For example, in paragraph [0025] at page 10, of the originally filed disclosure, it is stated that “[i]n one aspect, the invention provides a conjugate comprising one or more bioactive components covalently linked to at least one linear or branched monofunctionally activated polyalkylene glycol, wherein the monofunctionally activated polyalkylene glycol does not comprise a methoxyl group, another alkoxy group or an aryloxy group at ANY terminus.” This paragraph implies that none of the terminal ends of the PEG contain a methoxyl group, another alkoxy group or an aryloxy group. In fact, the specification directly links the reduced antigenicity of the conjugate to presence of hydroxyl groups at the distal ends. For example on page 21, the specification states that “polymers for use in preparing the conjugates of the present invention, which have reduced antigenicity, substantially reduced antigenicity, or no detectable antigenicity, are monofunctionally activated PEGs that do not contain methoxyl groups, other alkoxy groups or aryloxy groups.” This too implies that the distal end cannot contain methoxyl groups, other alkoxy groups or aryloxy groups. The instant claims,

Art Unit: 1654

however, allow for 5% undisclosed groups on the polyalkylene oxide on the distal end that are not hydroxyl groups.

More implicit support for the contention that 100% of the polyalkylene glycol(s) is or are attached to a protein/peptide/glycoprotein at a single site and a hydroxyl group is present on 100% of the distal polyalkylene glycol termini in said conjugate is found in the originally filed claims. Originally filed claim 22 stated "wherein said polyalkylene glycol, if linear, has a hydroxyl group at the terminus that is not attached to the bioactive component(s) ("the distal terminus") or, if branched, has a hydroxyl group at **every distal terminus**." Based on this claim and the originally filed disclosure, one would conclude that every distal terminus contain a hydroxyl group, thereby implying 100% of the polyalkylene glycol(s) is or are attached to a protein/peptide/glycoprotein at a single site and a hydroxyl group is present on 100% of the distal polyalkylene glycol termini in said conjugate.

Thus, the claims introduce new matter and fail to comply with the written description requirement.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be

Art Unit: 1654

calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANISH GUPTA whose telephone number is (571)272-0965. The examiner can normally be reached on 5/4/9.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tsang Cecilia can be reached on 571-272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anish Gupta/  
Primary Examiner, Art Unit 1654